



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,565	01/30/2002	John R. Stewart	2063.003600	7804

23720 7590 11/23/2004

WILLIAMS, MORGAN & AMERSON, P.C.
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER

JOHNSON, STEPHEN

ART UNIT	PAPER NUMBER
----------	--------------

3641

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/060,565

Applicant(s)

STEWART, JOHN R.

Examiner

Stephen M. Johnson

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 15, 17, 29-39, 41, 42, 44, 45 and 47-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15, 17, 29-39, 41, 42, 44, 45, 47-51, 53-58 and 60-62 is/are rejected.
- 7) ☒ Claim(s) 52 and 59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5-6, 8-11, 15, 17, 21, 24-26, 29-35, 37-38, 41-42, 44-45, 47-51, 53-58, and 60-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Cosman.

Cosman discloses a method comprising:

- a) sighting a position correlated to at least a subset of a 3-dimensional data set; col. 4, lines 14-40
- b) targeting a control system to the position from the 3-dimensional data set; col. 4, lines 35-38;
col. 16, lines 6-10
- c) processing and displaying the 3-dimensional data; 38, 38A, 39;
col. 8, lines 12-22
- d) a data acquisition system; and col. 12, lines 35-40
- e) a program storage medium for storing 3-dimensional data. col. 12, lines 51-65

Applicant's arguments are addressed as follows. It is argued that Cosman does not teach "targeting the position from the three dimensional data". In response, see col. 5, lines 45-50, and 57-58; and col. 6, lines 13-17; to name just a few examples. It is further argued that the target is determined from a set of "scan data". This is true, however, this

Art Unit: 3641

“scan data” is then converted into 3 dimensional co-ordinates (see col. 3, lines 17-18).

Applicant further argues that either the machine L or the supporting couch may be moved to accurately position the target beam B. This is the case, however, one could clearly

leave the supporting couch stationary and just move the machine L. Further, it makes no difference with regard to the claim limitations as to whether only one or both (L and F) are moved to properly position the target beam. Either requires the use of a three dimensional data set to accomplish this. It is further argued that two different data sets rather than a single set are used to accomplish “sighting” and “targeting”. This is not completely accurate. The two different data sets are combined to acquire a 3-dimensional data set and then “sighting” and “targeting” are performed (see col. 4, lines 27-40). It is further argued that “targeting” occurs prior to “sighting”. It is not understood as to how this is possible. How does someone acquire a target without seeing it or sensing it in some way prior thereto? It is further argued that “targeting” is not performed on a “sighted” position. This statement is not accurate. The “sighting” takes place during the initial camera scans (see col. 4, lines 27-34). The “targeting” takes place when the beam is oriented to the desired target position (see col. 4, lines 35-38). Consequently, every limitation of the rejected claim is met by Cosman and anticipation is clearly present.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cosman in view of Wangler.

Art Unit: 3641

Cosman applies as previously recited. However, undisclosed is a camera that is LADAR camera. Wangler teaches a camera that is a LADAR camera, see entire disclosure. Applicant is substituting one type of camera for another. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Wangler to the Cosman method and associated apparatus and have a method and associated apparatus that uses a different type of camera.

Applicant's arguments are addressed as follows. It is argued that the Office fails to establish why one of ordinary skill would seek to substitute one type of camera for another. In response, there is motivation to substitute one type of camera for another in both the primary reference (see col. 12, lines 8-15 of Cosman and col. 1, lines 4-10 of Wangler). Consequently, both the requirement that one of ordinary skill should make the combination as well as the combination of reasonable expectation of success is met. Further, the combination is motivated by the references as already demonstrated above and not through abstraction. The positive concrete evidence to combine being given in both references (col. 12, lines 8-15 of Cosman and col. 1, lines 4-10 of Wangler). Thus the prior art suggests the modification of the references to make obvious applicant's invention as claimed.

5. Claims 12, 19, 36, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cosman in view of Smith et al..

Cosman applies as previously recited. However, undisclosed is a storage medium that includes floppy disks; magnetic storage medium; and an optical disk. Also undisclosed is a touch screen to denote the target. Smith et al. teach a storage medium that includes floppy disks; magnetic storage medium; or an optical disks (see page 3,

Art Unit: 3641

lines 4-6). Smith et al. also teach a touch screen to denote a target (see figs. 3, 4).

Applicant is selecting a particular type of storage medium for the storage medium disclosed in Cosman; said storage medium being commonly known in this art. Applicant is also substituting one means for denoting a target for another in an analogous art setting. It would have been obvious to a person of ordinary skill in this art to apply the teachings of Smith et al. to the Cosman apparatus and associated method and have an apparatus and associated method that uses a different type of storage medium and a different type of target denotation means.

Applicant's arguments are addressed as follows. Since Smith et al. has a filing date of 12/22/2000, this reference does not lie outside the scope and content of the prior art. It is further argued that Smith et al. employs a two-dimensional data system. In response, note that Smith et al. is not being relied upon for its teaching regarding a two-dimension data system or a 3-dimension data system. Rather, Smith et al. is being relied upon for its teachings regarding alternative storage means and alternative means for denoting a target.

6. Claims 1-2, 4-11, 15, 17, 20, 25-35, 37-38, 41-42, 44-45, 54-55, 58, and 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al. in view of Turner.

Jenkins et al. disclose a method and associated apparatus for targeting comprising:

- a) program storage medium for storing 3-dimensional data; col. 5, lines 5-17
- b) a controller for generating the 3-dimensional data; col. 3, lines 64-67;
and col. 4, lines 1-3

c) a controller indicating a subset of the 3-dimensional data; col. 4, lines 1-3 and
22-27

d) providing a target location for a target platform using col. 20, lines 1-62
the subset of 3-dimensional data.

Jenkins et al. apply as recited above. However, Jenkins et al. does not explicitly disclose targeting using the target location data supplied to a target platform, see col. 20. Although it is hard to image what other use a targeting platform would have for target location data, none the less a teaching that explicitly teaches using target location data and its associated control system on an associated platform used for targeting or pointing a gun at a target has been provided (Turner, see entire disclosure and fig. 2 with associated description in particular). Applicant is putting the method and associated apparatus of Jenkins et al. to use as explicitly encouraged by Jenkins et al. (see col. 20) in an analogous art setting. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Turner to the Jenkins et al. apparatus and associated method and have an apparatus and associated method used in combination with a control system for targeting via target location data.

Applicant's arguments are addressed as follows. It is argued that the previous Office action concedes that Jenkins et al. does not teach targeting. This statement is inaccurate at best and is at least incomplete. The previous Office action states that there is no explicit teaching in this regard and infers that Jenkins would inherently have to have some form of targeting associated with the explicitly taught targeting platform. With regard to the issue of a teaching of a "targeting platform", see col. 20, lines 32-45.

Art Unit: 3641

It is further argued that Jenkins et al. provides high fidelity video information and that there is no suggestion to use this data for targeting or in a military application. In response, see col. 21, lines 16-40. References is made not only to intended military applications but also to battle-field synchronization and for trading information between the soldier and the decision maker. Further, figure 1 explicitly shows tanks being sensed or sighted via a thermal imager. Does applicant believe that the military merely uses this information to view the activity of adviseries without any subsequent targeting of the targets? Further, applicant admits that an attack could be conducted remotely from the platform.

It is further argued that there is no suggestion to combine Turner with Jenkins et al. The examiner repeats his position that col. 20 gives suggestion or motivation to combine. Col. 20 lists numerous different intended applications of the laser sensor recognition system of Jenkins et al. Numerous of these intended applications are military. The military is commonly known to sight and target advisory targets. Turner explicitly teaches how information from a remote platform is used to sight and target an intended target (a military application). Therefore the decision to sight and target is taught by Turner as explicitly encouraged by Jenkins et al. (col. 20) and not by hindsight combination. It is further argued that Turner does not contemplate the need to transmit data to a remote location. This statement is not accurate. Please see col. 4, lines 61-68 to col. 5, lines 1-5 and fig. 3. It is further argued that there is no need in Turner for a target recognition system since the Turner targets are visually acquired and targeted. This argument is not convincing. In almost all instances an automatic target recognition system (Jenkins et al.) is preferable to and desirable over other systems.

Art Unit: 3641

Consequently, the prima facie case is obvious over Jenkins et al. in view of Turner because (1) Jenkins et al. meets all claim limitations except those directed to an explicitly taught targeting system; (2) relies upon teachings in both Jenkins et al. and Turner to teach "sighting" and/or "targeting"; (3) and because Jenkins and Turner et al. are properly combinable for the reasons already listed above.

7. Claims 12, 36, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkins et al. in view of Turner as applied to claims 1-2, 4-11, 15-18, 20, 25-35, 37-38, 41-42, and 44-45 above, and further in view of Smith et al..

Jenkins et al. and Turner apply as previously recited. However, undisclosed is a storage medium that includes floppy disks; magnetic storage medium; or an optical disk. Smith et al. teach a storage medium that includes floppy disks; magnetic storage medium; or an optical disks (see col. 3, lines 4-6). Applicant is selecting a particular type of storage medium for the storage medium disclosed in Jenkins et al. said storage medium being commonly known in this art. It would have been obvious to a person of ordinary skill in this art to apply the teachings of Smith et al. to the Jenkins et al. in view of Turner apparatus and associated method and have an apparatus and associated method that uses a different type of storage medium.

Applicant's arguments are addressed as follows. Since Smith et al. has a filing date of 12/22/2000, this reference does not lie outside the scope and content of the prior art. It is further argued that Smith et al. employs a two-dimensional data system. In response, note that Smith et al. is not being relied upon for its teaching regarding a two-dimension data system or a 3-dimension data system. Rather, Smith et al. is being relied upon for its teachings regarding alternative storage means. Therefore Smith et al. is

Art Unit: 3641

directed to the same problem, storage of data, and with solutions for this problem already known in this art as taught by Smith et al..

8. Claims 52 and 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Applicant's arguments filed on 9/20/2004 have been fully considered but they are not persuasive. These arguments have been addressed in the preceding paragraphs of this Office action.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

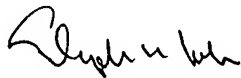
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 703-306-4158. The examiner can normally be reached on Tuesday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. Any inquiry of a general nature or relating to

Art Unit: 3641

the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326. The fax phone number for after final communications is (703) 872-9327.



STEPHEN M. JOHNSON
PRIMARY EXAMINER

Stephen M. Johnson
Primary Examiner
Art Unit 3641

SMJ